99C-111

4.5 PSP Cover Sheet (Attach to the front of each proposal)

Proposal Title: Granite Watershed Restoration Pilot Project
Applicant Name: USDA Forest Service, Stanislaus National Forest
Mailing Address: 19777 Greenley Rd., Sonora, CA 95370
Telephone: (209) 532-3671
Fax: (209) 533-1890
Email: rfinch/r5_stanislaus@fs.fed.us

Amount of funding requested: $4,555,000 for 3 years

Indicate the Topic for which you are applying (check only one box).

- ☐ Fish Passage/Fish Screens
- ☐ Habitat Restoration
- ☒ Local Watershed Stewardship
- ☐ Water Quality
- ☐ Introduced Species
- ☐ Fish Management/Hatchery
- ☐ Environmental Education

Does the proposal address a specified Focused Action? X yes _____ no

What county or counties is the project located in? Tuolumne County

Indicate the geographic area of your proposal (check only one box):

- ☐ Sacramento River Mainstem
- ☐ Sacramento Trib: _____
- ☐ San Joaquin River Mainstem
- ☒ San Joaquin Trib: Tuolumne River
- ☐ Delta: _____
- ☐ East Side Trib: _____
- ☐ Suisun Marsh and Bay
- ☐ North Bay/South Bay: _____
- ☐ Landscape (entire Bay-Delta watershed)
- ☐ Other: _____

Indicate the primary species which the proposal addresses (check all that apply):

- ☒ San Joaquin and East-side Delta tributaries fall-run chinook salmon
- ☐ Winter-run chinook salmon
- ☐ Late-fall run chinook salmon
- ☐ Delta smelt
- ☐ Splittail
- ☐ Green sturgeon
- ☐ Migratory birds
- ☐ Other: _____
- ☐ Spring-run chinook salmon
- ☐ Fall-run chinook salmon
- ☐ Longfin smelt
- ☐ Steelhead trout
- ☐ Striped bass
- ☐ All chinook species
- ☐ All anadromous salmonids

Specify the ERP strategic objective and target (s) that the project addresses. Include page numbers from January 1999 version of ERP Volume I and II:
ERP Strategic Plan (page 88) - Action 9, Tuolumne River. No items in Volume I & II (February1999) are referenceable because previously included upper watershed process targets have been deleted from these documents.

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Indicate the type of applicant (check only one box):

☐	State agency	☒	Federal agency
☐	Public/Non-profit joint venture	☐	Non-profit
☐	Local government/district	☐	Private party
☐	University	☐	Other: _____

Indicate the type of project (check only one box):

☐	Planning	☒	Implementation
☐	Monitoring	☐	Education
☐	Research		

By signing below, the applicant declares the following:

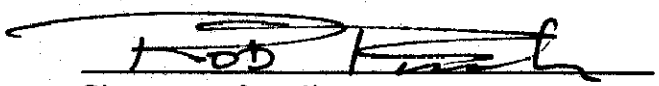
1.) The truthfulness of all representations in their proposal;

2.) The individual signing the form is entitled to submit the application on behalf of the applicant (if the applicant is an entity or organization); and

3.) The person submitting the application has read and understood the conflict of interest and confidentiality discussion in the PSP (Section 2.4) and waives any and all rights to privacy and confidentiality of the proposal on behalf of the applicant, to the extent as provided in the Section.

ROB FINCH

Printed name of applicant



Signature of applicant

Granite Watershed Restoration Pilot Project

Applicant

USDA Forest Service
Pacific Southwest Region
Stanislaus National Forest
19777 Greenley Road
Sonora, CA 95370

Primary Contact

Rob Finch
209-532-3671
209-533-1890 (fax)
rfinch/r5_stanislaus@fs.fed.us

Participants and Collaborators

Tuolumne County Board of Supervisors
Our Back Yard Group of Toulumne County (OBY)
Regional Council of Rural Counties
Sierra Resource Management, Inc.
Tuolumne County Alliance for Resources and Environment
Central Sierra Environmental Resource Center (CSERC)
U.S. Representative John Dolittle

I-017216

Executive Summary

Project Description and Primary Biological/Ecological Objectives

This project is a pilot demonstration of watershed protection and restoration using Stewardship Contracting Authority within and adjacent to the Granite Burn on the Stanislaus National Forest. The Granite Burn occurred in August, 1973, and consumed 17,000 acres of Forest Service and private land in the eastern portion of the forest near Yosemite National Park. The Granite Burn is in the Tuolumne River Watershed. The project area is about 8,000 acres.

The Granite project area has been selected because post-burn restoration and maintenance has been deferred due to funding limitations. There is currently a large backlog of needed restoration in this area. Timber plantations are at extreme risk from wildfire. The project will provide immediate watershed protection benefits and will serve as a learning model for coordinating and optimizing efficiency in multi-resource restoration of forest watersheds.

Primary Biological/ Ecological Objectives

1. To restore ecological process in the project area, especially vegetative diversity and hydrologic function in meadows and riparian areas.
2. To serve as a model for coordinating and implementing future multi-resource restoration efforts.

Approach/Task/schedule

We plan to design, coordinate and implement the following tasks over a 3 year period:

- Thinning conifer vegetation to reduce risk of stand replacing wildfire. This will be accomplished by thinning about 5,000 acres of ponderosa pine plantations and 1000 acres of second growth mixed conifer thinning. This work can start in 2000 and would be accomplished within 3 years.
- Road obliteration, reconstruction and maintenance to reduce stream sedimentation. This will be accomplished by closing unneeded roads, reconstructing others and performing maintenance elsewhere. This work can start in 2001 and would be accomplished within a 2 year timeframe.
- Brush removal in riparian areas followed by establishing riparian species to enhance shading and increase plant diversity. This work can start in 2001 and would be accomplished with in a 2 year time frame.

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- Restore hydrologic function in meadows to increase water holding capacity and reduce sedimentation. This work can start in 2001 and would be accomplished within a 2 year timeframe.
- Restore soil productivity by tilling compacted areas, redistributing previously displaced topsoil and replacing large woody material on the forest floor. This work can start in 2001 and be done in 2 years.

Budget Costs and Third Party Impact

Total project costs are estimated to be $4,555,000. Third party effects will accrue as benefits to the local economy from the employment and monetary recirculation generated by this project.

Applicant Qualifications

The Forest Service is well experienced as a land steward. Together with private contractors this project can be professionally implemented.

Monitoring

Implementation and effectiveness monitoring would be conducted on all tasks in this project.

Local Support/Compatibility with CALFED Objectives

The project is a cooperative effort among the Stanislaus National Forest, Toulumne County, the Regional Council of Rural Counties, Our Back Yard Group of Toulumne County (OBY), Sierra Resource Management, Inc., Tuolumne County Alliance for Resources and Environment (TUCARE), Central Sierra Environmental Resource Center (CSERC), and U.S. Representative John Dolittle.

This project is compatible with two of the overall goals of CALFED - water quality and ecosystem quality. It also addresses ERP Goal 2 - rehabilitation and protection of natural resources.

This project also meets the intent of ERP Strategic Plan's Action 9 for the Tuolumne River (Strategic Plan, page 88). The project will reduce fine sediment transport by reducing the erosion rate in the watershed.

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Project Description

This project is a pilot demonstration of watershed protection and restoration using federal Stewardship Contracting Authority within and adjacent to the Granite Burn on the Stanislaus National Forest. The project area is about 8,000 acres. The Granite Burn is in the Tuolumne River Watershed.

Project Location

The Granite Watershed Restoration Pilot Project is located within and adjacent to the Granite Burn on the Stanislaus National Forest in Toulumne County (Figures 1 & 2). The Granite Burn is near the eastern boundary of the forest within three miles of Yosemite National Park.

Project Background

The Granite Fire burned 17,000 acres in August, 1973, on a combination of prime timber and watershed lands managed by the Forest Service and private land owners. The Forest Service currently manages about 8,000 acres while Sierra Pacific Industries owns nearly all of the remaining land. Although the Stanislaus National Forest replanted the burned area to the extent that funds would allow, maintenance funds have not been sufficient to fully support key operations such as plantation thinning, road maintenance and restoration of streams and wildlife habitat damaged following the fire.

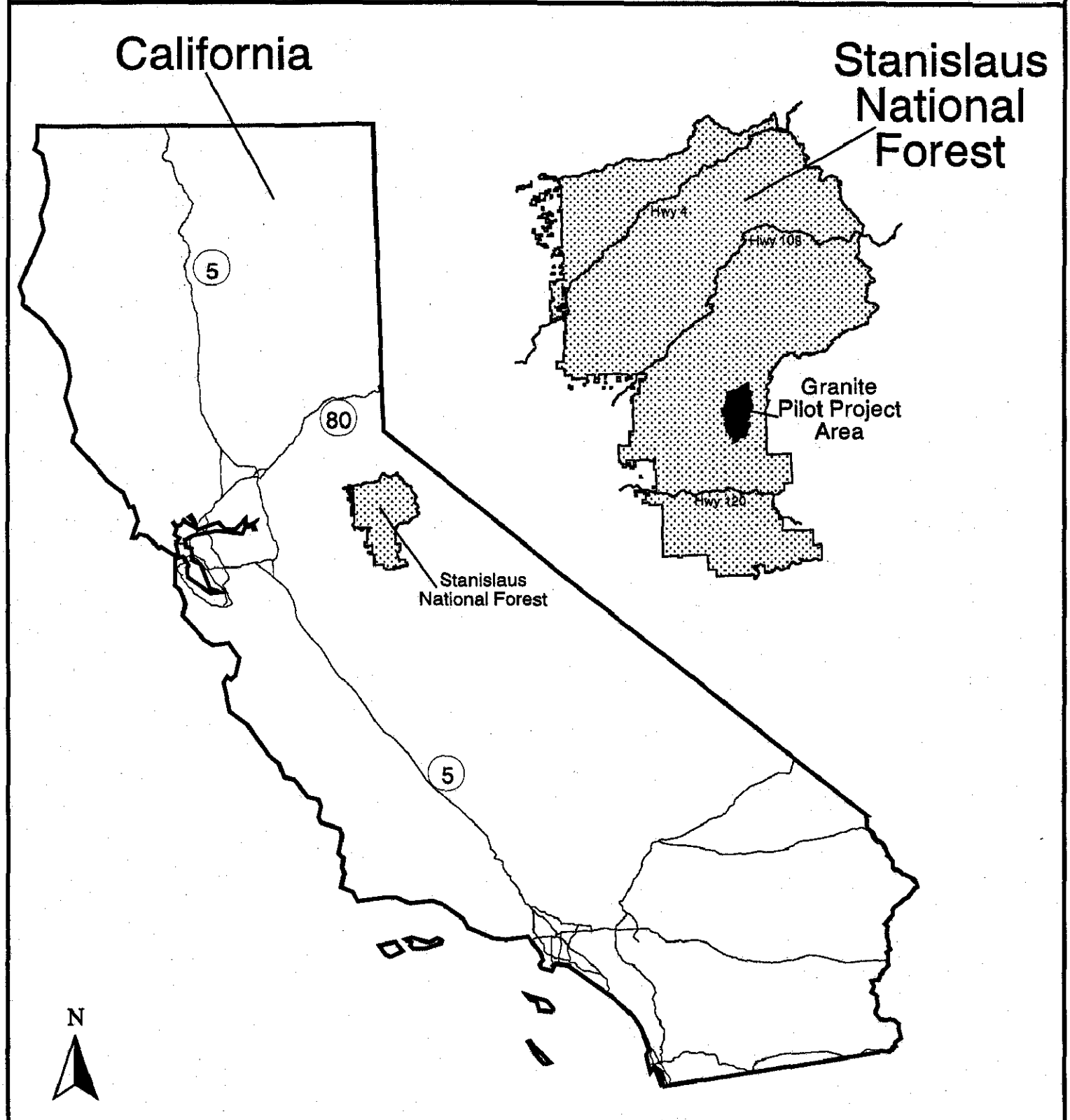
As the Granite plantations have grown over the past 25 years they have become an increasingly dangerous fire hazard. The Granite Burn was nearly reburned in 1996 when the adjacent 50,000 acre Ackerson-Rogge Fire was halted only a half mile away.

The Granite Burn is the forest's greatest at-risk fire hazard. Millions of dollars have been invested in reforestation, roads, and watershed and wildlife restoration projects over the past two decades. The greatest danger to the area's vegetation, water quality and wildlife is another fire.

To reduce the fire risk and improve degraded watershed conditions in the Granite Burn, the Stanislaus National Forest has since 1996 successfully advocated for and achieved special status for the area. The Forest applied for and was awarded a Forest Service Chief's Pilot Project Initiative grant to plan area improvements. The Forest has also gained wide support from local organizations, including Our Back Yard of Toulumne County (OBY), which has provided substantial planning input to the project. The project has also been endorsed by the Toulumne County Board of Supervisors, the Regional Council of Rural Counties, Toulumne County Alliance for Resources and the Environment (TUCARE), Sierra Resource Management, Inc. and Central Sierra Environmental Resource Center (CSERC). In 1997 Congressman John Dolittle sponsored federal legislation to

Granite Watershed Restoration Pilot Project

Figure 1 - Vicinity



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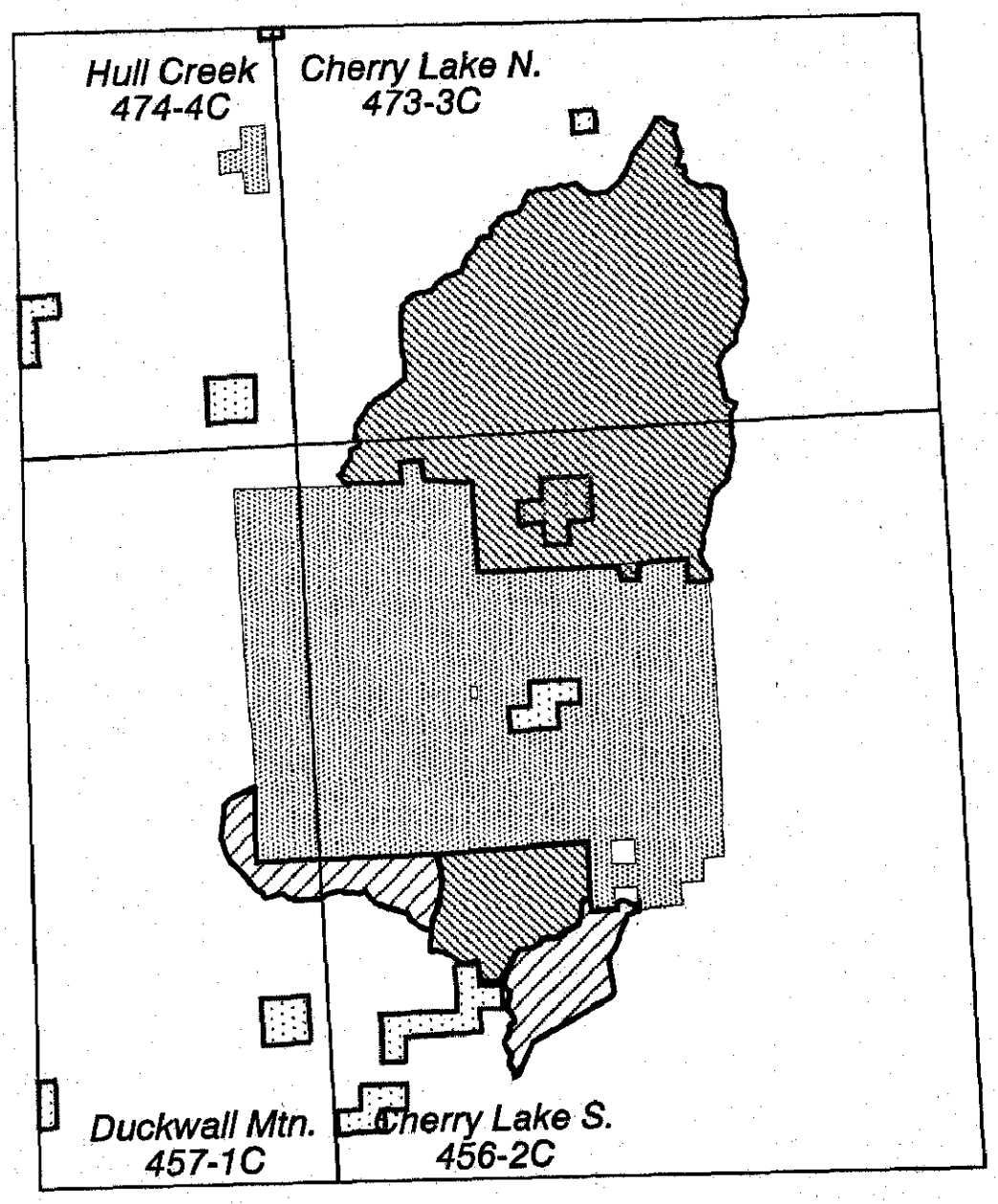
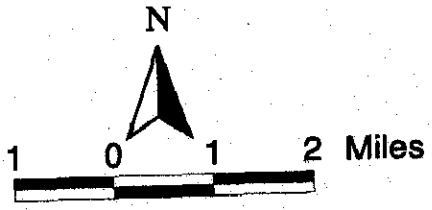
Granite Watershed Restoration Pilot Project

Figure 2 - Area





Granite Burn
Adjacent Treatment Area
Private Land
Sierra Pacific Industries (SPI)
Quads

support the project. The legislation was signed into law as H.R.2886 in January, 1998.

While there is substantial local support for the Granite Watershed Restoration Pilot Project, funding is not yet secured. The federal legislation did not provide funding but requested the Forest Service to attempt to fund it out of regular appropriations. While the Chief's Pilot Project program may partially fund the project, appropriated funds are very limited. Thus, the Stanislaus National Forest, with full support from the local community, is seeking financial support through the CALFED program since the Granite Project is within the ERP eligibility area.

Scope Of Work

The scope of work for this project includes the following:

- Planning and Environmental Analysis - An interdisciplinary team of resource specialists from the Stanislaus National Forest is currently preparing a NEPA Environmental Analysis to implement the following work in the Granite Burn:
- Restoration of degraded streams and meadows to improve riparian habitat, water quality and restore natural streamflow regime in the area;
- Reduction of severe wildfire risk by thinning about 5,000 acres of timber plantations in the Granite Burn and thinning and treating fuels in about 1,000 acres of adjacent second growth timber (the latter is included in order to provide a fuel break surrounding part of the Granite Burn);
- Improvement of wildlife habitat by rejuvenating about 2,000 acres of brushfields.
- Obliteration of unneeded roads and reconstructing or maintaining degraded roads in the area in order to reduce stream sedimentation.
- Restoration of soil productivity by reducing erosion, compaction, redistributing topsoil and placing down woody material to stimulate improvement of soil biology.

The scope of work above is subject to revision based on the decision reached in the Environmental Analysis although it is expected to be substantially as described.

Project Approach

This project will be implemented as a pilot Stewardship Contracting opportunity whereby a single contractor will be responsible for managing multiple-resource tasks in an area over multiple years. Traditionally the contracting authority available to the Forest Service has been single task with single year funding. The new Stewardship Contracting opportunity is believed to be a method to improve efficiency of implementing watershed management on the National Forests. This opportunity is provided for in H.R.2886 and under Section 347 of the Omnibus Consolidated Appropriations Act of Fiscal Year 1999.

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The Omnibus Act gives the Forest Service the authority to test new contracting procedures for achieving land stewardship objectives that are responsive to local and rural community needs. A key provision of the Act is to allow trading goods for services (i.e., timber revenue for stream restoration activities). However, insofar as this project is in an area with limited timber revenue since most thinning is in non-commercial size timber plantations, the service costs will exceed the value of the goods. Thus, supplemental funding is necessary.

Tasks, Construction Methods and Deliverables

1. Stream Restoration - Two methods will be conducted to restore streams. First, channel morphology will be repaired by reshaping and installing grade stabilizers as needed. Second, brush will be removed and replaced with true riparian species as necessary. The product, or deliverable, will be feet of restored stream.
2. Meadow Restoration - Rewatering meadows will be accomplished by raising the water table through fill importation and/or relocating stream channels within meadows. Revegetation will be conducted as needed to restore cover. The deliverable will be acres of restored meadow.
3. Tree Thinning - Plantations will be thinned to silvicultural and fuel treatment specifications by mechanical means. The deliverable will be acres of thinning to the specified stand density and vertical fuel profile.
4. Brush Rejuvenation - Brush will be shredded, raked or burned to wildlife habitat specifications. The deliverable will be acres of brush rehabilitated.
5. Road Obliteration and reconstruction/maintenance - Unneeded roads will be decommissioned using a variety of site-specific mechanical techniques. Other road segments will be maintained and/or reconstructed. The deliverable will be miles of road treated.
6. Soil Productivity Restoration - Soils will be treated via mechanical means to reduce erosion and compaction, replace down logs and to redistribute displaced topsoil. The deliverable will be acres of soil improved.

Project Phases

This project will be conducted in one phase under Stewardship Contract authority. The contractor performing the tasks will have the ability to stage the work as deemed best. It is expected the work will be accomplished in 3 years.

Project Management

Management during the life of the project will be conducted by the Forest Service using a staff consisting of a Contracting Officer, Contracting Officer's Representative and Contract Inspectors.

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Ecological/Biological Benefits

Ecological/Biological Objectives

The overall goal of the project is to restore ecosystem processes to within their range of natural variability. Specific ecological and biological objectives include:

- Protecting water quality, forest health, soil productivity and habitat for aquatic and terrestrial wildlife.
- Restoring hydrologic function to riparian areas.
- Reducing stream sedimentation.
- Reintroducing low intensity fire as a natural process.
- Restoring soil productivity.

Primary, Secondary and Other Benefits

The primary benefits of this project include:

- Improvement of water quality and quantity attributes;
- Reduction of fine sediment to aquatic systems;
- Improvement of soil resource values;
- Protection of the health of forest vegetation;
- Protection and improvement of wildlife habitat;
- Protection of past economic investment in reforestation and other restoration activities;
- Demonstration of Stewardship Contracting;

Secondary benefits include:

- Protection of scenic and recreational values;
- Restoration of old growth forest (this area has high potential for growing large trees);

Other benefits include:

- Contribution of this project to a strategic initiative for improving the larger landscape in the upper Toulumne River watershed. The Granite area is one of several large-scale watershed health proposals in the area;
- Contribution to the local economy from the goods and services provided by this project.

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Evaluation of Benefits

Hypotheses to be evaluated during this project are related to each work task, as follows:

- Thinning conifer vegetation will decrease fire risk;
- Thinning and brush rejuvenation will improve wildlife habitat condition;
- Meadow treatments will increase water holding capacity;
- Stream channel treatments will increase vegetative diversity and reduce erosion;
- Soil restoration activities will increase soil productivity;
- Road obliteration/reconstruction will decrease stream sedimentation.

Each hypothesis will be evaluated by measuring a monitoring parameter (in most cases an ecological indicator). These are shown in the table in the Monitoring section.

Linkages

This project meets the intent of two of the overall CALFED goals - water quality and ecosystem quality. More specifically, it addresses ERP Goal 2, rehabilitation and protection of natural processes.

This project also meets the intent of the ERP Strategic Plan's Action 9 for the Tuolumne River (Strategic Plan, page 88). The project will reduce fine sediment transport by reducing the erosion rate in the watershed.

One of the most significant strategic aspects of this project is its intent to comply with legal direction and federal policy initiative:

- H.R.2886
- Omnibus Consolidated Appropriations Act of Fiscal Year 1999.
- Forest Service Chief's Stewardship Initiative.

System-Wide Ecosystem Benefits

This project will contribute to improved water quality and ecosystem quality and promotes the nexus between the upper watersheds and other portions of the CALFED area. Reduction of fine sediment in the Tuolumne River watershed is a benefit to fall-run chinook salmon.

The project is compatible with CALFED non-ecosystem objectives.

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Technical Feasibility and Timing

This project is technically feasible because the each work task has an established record of implementability. Completion of work tasks is expected to be accomplished in the project time frames.

Compliance with NEPA is being conducted and will be completed prior to the time this project is expected to begin implementation in the year 2000.

There are no known problems with county ordinances or land ownership since the project is on federal land.

Monitoring and Data Collection Methodology

The approach to monitoring this project will include monitoring tasks as required in the National Forest Management Act of 1976 (NFMA). Those are implementation, effectiveness and validation monitoring.

Implementation, effectiveness and validation monitoring can be conducted relative to each of the tasks and hypotheses previously discussed. Each hypothesis can be evaluated as a question. For example:

- Will thinning conifer vegetation reduce fire risk?
  - Was thinning implemented?
  - Was thinning effective in reducing fire risk?
  - Was it correct to assume thinning treatments would reduce fire risk?

The remaining questions below can be similarly evaluated:

- Will thinning improve wildlife habitat condition?
- Will meadow treatments increase water holding capacity?
- Will stream channel treatments increase vegetative diversity and reduce erosion?
- Will soil restoration activities increase soil productivity?
- Will road obliteration/reconstruction/maintenance reduce stream sedimentation?

Other questions may be developed during project planning. Project monitoring will begin following task completion and extend as far as needed into the future to be able to answer the questions. Implementation questions will be able to be answered within a short period. Effectiveness questions are expected to take at least 3-5 years to answer.

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Monitoring Parameters and Data Collection Approach

The table below shows the monitoring parameters. Data would be collected by Forest Service resource professionals or by contract. Protocols for monitoring include numerous Forest Service adopted methods such as herbaceous/woody plant frequency transects, water quality Best Management Practices, fuel model transects/plots and soil quality standards testing.

Data Evaluation Approach

Data evaluated from monitoring this project will likely be evaluated relative to a desired ecological condition. Interim reports will be completed as needed. At the minimum, an annual report will be prepared.

Monitoring and Data Collection Information

Question to be Answered	Monitoring Parameters (Environmental Indicators)	Data Evaluation Approach*
Will thinning conifer vegetation reduce fire risk?	Horizontal & vertical fuel profiles	Does the thinning achieve the desired fuel condition (spacing, ladder and ground fuels, etc.)?
Will thinning improve wildlife habitat condition?	Biodiversity and structural character of plant species	Is plant diversity and structure moving toward desired condition?
Will meadow treatments increase water holding capacity?	Vegetative composition	Is the vegetative composition changing to riparian potential?
Will stream channel treatments increase vegetative diversity and reduce erosion?	Vegetative composition, cover, streambank stability	Is the vegetative composition changing toward riparian potential? Is streamside cover sufficient to reduce erosion?
Will soil restoration activities increase soil productivity?	*Infiltration, surface organic matter,* down log density and quality	Is soil productivity increasing toward desired condition?
Will road obliteration and reconstruction and maintenance reduce stream sedimentation?	*Water Quality Best Management* Practices evaluations; in-stream fine sediment measures	Is road caused sediment being reduced toward the desired condition?

* Desired Condition is found in the Stanislaus National Forest Land and Resource Management Plan or other related documents.

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Local Involvement

Local support for the Granite Watershed Restoration Pilot Project has been very strong. Involved groups and individuals include the following:

- Our Back Yard of Toulumne County (OBY)

  OBY began in May, 1997, as a group of diverse interests seeking common ground on a number of issues in the county. A number of committees evolved, including the Natural Resources and Environment Committee. The first task they addressed was the Granite Project. They have provided the Stanislaus National Forest with a written report which will be useful in leading toward successful implementation of the project.

- Toulumne County Board of Supervisors (BOS)

  The BOS has been an advocate of this project for over two years. The Stanislaus National Forest has made two presentations to the Board of Supervisors on this project. The BOS support has led to numerous newspaper articles and to local access TV broadcasts which have resulted in widespread informing of County residents. The BOS has been notified by letter of this project (letter attached).

- Regional Council of Rural Counties (RCRC)

  RCRC has, like the Tuolumne BOS, been fully supportive of this project.

- Central Sierra Environmental Resources Center (CSERC) and Sierra Resource Management, Inc. (SRM)

  CSERC, a principal environmental coalition in Tuolumne County and SRM, a forest product company, have been active supporters of the Granite Project. They recently wrote a joint letter of support (February 17, 1999), to the Regional Forester.

- Tuolumne County Alliance for Resources and the Environment (TUCARE)

  TUCARE is a resource use group that seeks common ground and collaboration on resource issues throughout the County.

- Local Congressman John Dolittle sought and was successful in achieving federal legislation in support of the Granite Project, (H.R.2886).

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Project Cost

The costs below represent the best available maximum estimates. Since the NEPA process is in progress the scope and intent of the project remains in development. However, we believe the work proposed herein is substantially accurate.

Funding of this project by CALFED can be done incrementally in any proportion of the request. Because this will be a Stewardship Contract demonstration project most if not all of the work tasks will need to be implemented. Thus, if this project is partially funded each task will be proportionately reduced.

The scheduling of the project tasks is likely to be as follows: Thinning, Brush Rejuvenation: 2000-2002; Streams/meadows, Roads and Soil: 2001-2002.

Project Costs - Total Budget

Task	Direct Salary and Benefits	Service Contract	Overhead (25%)	Total Cost
Task 1: Riparian Restoration (streams and meadows)		$160,000		$160,000
Task 2: Thinning		$3,000,000		$3,000,000
Task 3: Brush Rejuvenation		$570,000		$570,000
Task 4: Road Obliteration and Reconstruction		$650,000		$650,000
Task 5: Soil Restoration		$100,000		$100,000
Task 6: Project Management	$40,000		$10,000	$50,000
Task 7: Monitoring	$20,000		$5,000	$25,000
Total	$60,000	$4,480,000	$15,000	$4,555,000

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Quarterly Budget

Quarter	Task 1	Task 2	Task 3	Task 4	Task 5	Task 6	Task 7
Apr-Jun 00		$300,000	$50,000			$5,000	
Jul-Sep 00		$300,000	$90,000			$5,000	
Oct-Dec 00		$400,000	$50,000			$5,000	$5,000
Jan-Mar 01							
Apr-Jun 01		$300,000	$50,000	$75,000		$5,000	
Jul-Sep 01	$40,000	$300,000	$90,000	$200,000	$25,000	$5,000	
Oct-Dec 01	$40,000	$400,000	$50,000	$60,000	$25,000	$5,000	$10,000
Jan-Mar 02						$5,000	
Apr-Jun 02		$300,00	$50,000	$75,000		$5,000	
Jul-Sep 02	$40,000	$300,00	$90,000	$200,000	$25,000	$5,000	$5,000
Oct-Dec 02	$40,000	$400,00	$50,000	$60,000	$25,000	$5,000	$5,000
Totals	$160,000	$3,000,000	$570,000	$650,000	$100,000	$50,000	$25,000

Cost Sharing

While this application seeks full CALFED funding, costs may be shared with other federal appropriated funds within the Forest Service. However, at this time those funds are uncertain in time and amount. If and when Forest Service funds are available they would be used first and CALFED funds would be supplemental.

Applicant Qualifications

The Stanislaus National Forest has the capability and experience to implement the Granite Watershed Restoration Pilot Project. The project work tasks have been successfully conducted on the forest and, in the context of a Stewardship Contract, the forest has expertise in contracting of this nature.

The Stanislaus National Forest has resource professionals who can conduct or oversee project monitoring and reporting as previously described.

The Stanislaus National Forest has financial professionals who can successfully conduct necessary accounting for this project.

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Standard Terms and Conditions

The terms and conditions in PSP Attachment D are acceptable. Since the Stanislaus National Forest is an agency as shown in PSP Attachment D-1 we are not required to submit forms at this time.

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United States Department of Agriculture

Forest Service

Stanislaus National Forest

19777 Greenley Road
Sonora, CA 95370
(209) 532-3671
FAX: (209) 533-1890
TTY/TDD: (209) 533-0765
http://www.r5.fs.fed.us/stanislaus

File Code: 2520

Date: APR 15 1999

Mr. Mark Thornton, Chair
Tuolumne County Board of Supervisors
2 S. Green Street
Sonora, CA 95370

Dear Mark:

I'm writing to let you know that we are submitting a CALFED funding application for the Granite Watershed Restoration Project. The application is in response to CALFED's most recent proposal solicitation package. We will be submitting the application April 16 and expect to learn its outcome in July.

We appreciate the County's continuing support for the Granite Project. If you have any questions, feel free to call me or Rob Finch.

Sincerely,

BEN L. DEL VILLAR
Forest Supervisor